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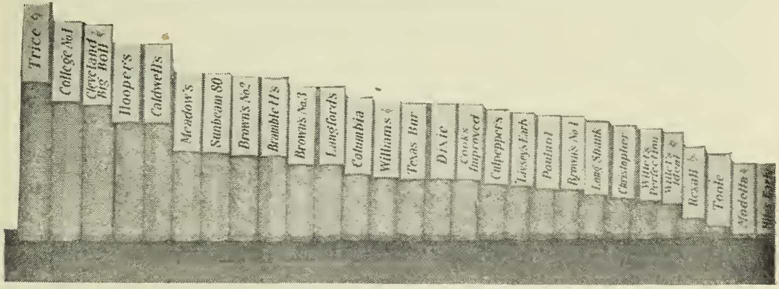

Relative amounts of cotton first and second pickings (see table 1)

Cotton Variety Tests

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Test of Cotton Varieties on College Demonstration Field

Plowing. The land on which the cotton varieties in Table I were grown in 1915 is a red sandy loam (Cecil sandy loam). A crop of oats followed by cowpeas occupied the land the previous year. The peas were plowed under in the fall and the area was left rough for freezing and thawing to break up and mellow. In early spring the the area was double cut with a disc harrow and the soil was made firm by a hard rain which fell the next day.

Fertilizer. The first week in April fertilizer of a 10-3-4 mixture was applied at the rate of 500 pounds per acre. The mixing was done in the College barn, the following materials being used without fillers:

312.5 lbs.	acid phosphate, containing 16% available phosphoric acid.
37.5 lbs.	sulphate of ammonia, containing 20% nitrogen.
41.5 lbs.	calcium cyanamid, containing 18% nitrogen.
40 lbs.	sulphate of potash, containing 50% available potash.
431.5	

In order that the fertilizer might be applied evenly it was divided into two equal parts, half of which was applied on the plots from north to south and half from east to west.

The field was then gone over with a light spike-tooth harrow which covered the fertilizer and mixed it with the top soil.

TABLE I. *Showing the Result of Cotton Variety Test on the College Demonstration Field, Athens, Ga., 1915.*

Rank According to Yield of Seed Cotton	NAME OF VARIETY	YIELD, CALCULATING ON ACRE BASIS						Bolls to Pound	Length of Lint in Inches	Per Cent Lint
		First Picking Sept. 22	Second Picking Sept 29	Third Picking October 12	Fourth Picking November 5	Total Yield Seed Cotton per Acre	Total Yield Lint Cotton per Acre			
1	College No. 1	789	812	701	717	3119	1069	58	1	34.3
2	Cleveland Big Boll	770	830	662	706	2968	1046	59	1	35.3
3	Dixie	444	627	750	1143	2964	1017	72	15/16	34.3
4	Culpepper's	443	605	804	1089	2941	1038	59	13/16	35.3
5	Caldwell's	549	917	851	623	2940	1008	52	⅞	34.3
6	Sunbeam 80	661	616	747	826	2850	1006	60	1 1/16	35.3
7	Williams'	474	608	735	967	2784	983	62	1	35.3
8	Brown's No. 2	567	693	807	680	2747	997	56	⅞	36.3
9	Brown's No. 3	589	629	649	872	2739	994	57	15/16	36.3
10	Trice	954	771	698	286	2709	842	75	1 1/16	31.1
11	Columbia	566	546	724	865	2701	818	59	1 3/16	30.3
12	Meadows	499	803	684	712	2698	898	54	1	33.3
13	Toole	247	402	486	1514	2649	935	78	1	35.3
14	Langford's	460	733	750	703	2645	934	62	15/16	35.3
15	Hooper's	718	763	626	536	2643	933	65	15/16	35.3
16	Texas Bur	505	567	662	692	2626	874	53	15/16	33.3
17	Livsey's Early	374	628	717	865	2584	912	63	⅞	35.3
18	Sunbeam 64	376	575	602	1005	2558	852	56	⅞	33.3
19	Poulnot	484	517	765	754	2520	890	57	1	35.3
20	Willet's Ideal	370	509	802	821	2502	876	60	15/16	35.0
21	Christopher	444	481	822	716	2463	820	52	15/16	33.3
22	Brown's No. 1	413	582	670	779	2434	859	63	⅞	35.3
23	Rexall	316	448	562	1087	2413	803	74	1	33.3
24	Willet's Perfection	400	492	538	899	2329	869	61	⅞	37.3
25	Modella	287	330	495	1199	2311	839	73	1	36.3
26	Hite's Early	256	359	549	1139	2303	858	84	15/16	37.5
27	Cook's Improved	449	602	614	610	2275	848	61	⅞	37.3
28	Bramblett's	621	625	562	463	2271	802	59	1 1/16	35.3
29	Long Shank	380	551	578	556	2065	688	58	13/16	33.3

Preparation and Planting

The rows were accurately laid off four feet apart, and this was followed by a Planet, Jr., with two small shovels and two turning plows attached, thus listing and bedding at one operation.

It was the intention to await a rain before planting so that the seed could be planted in firm moist soil, but two days later help being available, the seed were planted in a freshly opened furrow. By April 12th most of the seed had germinated, and came up immediately. Some of them, as would be expected, were not sufficiently moist to germinate and came up after a rain three weeks later. A very good stand was secured, but was not a sufficiently even stand to make possible an accurate test of the varieties. It was deemed advisable on this account, to plant again and this was done on May 10th, about one month later than the first planting. The soil was in ideal condition, however, and a perfect stand was obtained. Conditions were favorable at this time of the year so the plants grew very rapidly. They were thinned to two stalks per hill, the hills being 18 inches apart. All subsequent cultivation was frequent and shallow, a Planet Jr. one-horse implement being used.

Favorable conditions continued throughout the year and the late fall enabled the harvesting of a much better crop than had been expected. In fact, it was all open and harvested without any frost tinges. The crop afforded the most accurate test for a comparison of the different varieties that has been secured at the College for a number of years.

Tests of Cotton Varieties in Other Parts of the State

The soil, climate and other conditions in south Georgia differ so greatly from those existing in the vicinity of Athens that the College has undertaken under coöperative arrangements to test cotton varieties at two points in the southern portion of the state. These areas have been used two years. One is located at Ashburn, in Turner county, and the other at Quitman, in Brooks county.

TABLE II. *Showing the Results of Variety Tests of Cotton in Turner County, 1915.*

Rank According to Yield of Seed Cotton	NAME OF VARIETY	YIELD, CALCULATING ON ACRE BASIS					Bolls to Pound	Length of Lint in Inches	Per Cent Lint
		First Picking August 24	Second Picking September 24	Total Yield Seed Cotton	Per Cent Stand at Maturity	Total Yield Lint Per Acre			
1	Poulnot	515	500	1015	75	375	67	15/16	37
2	Cov. Toole	610	385	995	93	358	89	15/16	36
3	Sunbeam	515	460	975	82	341	67	15/16	35
4	Wanam'krs Cleveland	585	385	970	77	359	64	7/8	37
5	Webber	515	415	930	84	288	62	1 1/4	31
6	Cook's	565	320	885	77	327	67	15/16	37
7	Cleveland Big Boll	395	415	810	68	300	67	1	37
8	College No. 1	545	255	800	79	288	70	15/16	37
9	Brown's No. 1	435	340	775	75	279	70	15/16	36
10	Trice	420	345	765	71	260	76	7/8	34
11	Dixie	425	340	765	80	260	80	7/8	34
12	Modella	455	305	760	84	266	89	7/8	35
13	Culpepper	320	385	705	73	240	67	7/8	34
14	Shank High	475	170	645	81	226	80	7/8	35
15	Columbia	475	150	625	81	194	64	1 1/4	31
16	Brown's No. 2	325	300	625	59	219	67	7/8	35
17	Christopher	290	200	490	85	172	59	7/8	35
18	Broadwell's	295	160	455	73	164	80	7/8	36
19	Gila	----	240	240	86	79	145	1 5/16	33
20	Pima	----	185	185	86	63	160	1 5/16	34
21	Yuma	----	180	180	86	59	160	1 3/16	33

In Turner county twenty-one varieties of cotton were grown on land infected with wilt, or "Black-root." This disease affected some varieties more than others and resulted in an imperfect stand at maturity, as shown under "per cent of stand" in Table II." In order to show the results obtained under "Black-root" conditions, the yields are calculated on a basis of the actual cotton picked from each plat, with no allowance for the imperfect stand. The soil at this place is a pebbly loam (Tifton sandy loam) and is a typical soil for that section of the state. 500 pounds of fertilizer per acre were used on this area, which were taken from the following mixture:

1200 lbs. 16% acid phosphate
200 lbs. sulphate of ammonia
200 lbs. sulphate of potash.

This mixture would analyze approximately 11-3-7.

TABLE III. *Showing the Results of Variety Tests of Cotton in Brooks County, 1915.*

Rank According to Yield of Seed Cotton	NAME OF VARIETY	YIELD, CALCULATING ON ACRE BASIS						Bolls to Pound	Length of Lint in Inches	Per Cent Lint
		First Picking	Second Picking	Third Picking	Total Yield Seed Cotton	Per Cent Stand at Maturity	Total Yield Lint Per Acre			
1	Covington Toole	600	340	140	1080	95	400	80	1	37
2	Dixie	600	320	120	1040	96	354	80	15/16	34
3	Trice	640	300	80	1020	96	347	80	7/8	34
4	College No. 1	600	300	60	960	99	336	73	15/16	35
5	Wanamaker's Cleveland	600	220	140	960	95	365	67	7/8	38
6	Modella	520	320	120	960	97	346	89	7/8	36
7	Brown's No. 2	540	320	80	940	94	348	64	7/8	37
8	Cook's	560	220	140	920	99	350	67	1	38
9	Culpepper	540	320	60	920	90	322	70	7/8	35
10	Sunbeam	580	200	120	900	95	324	67	1	36
11	Broadwell's	560	200	40	800	96	288	80	7/8	36
12	Cleveland Big Boll	420	180	160	760	95	281	67	1	37

In Brooks county twelve varieties of cotton were grown, as shown in Table III. The stand was not damaged by "Black-root" on this area, but the yields are calculated on a basis of the actual cotton picked from each plot. The soil at this place is a gray, sandy loam and is typical of south Georgia. Commercial fertilizer from a mixture of 1000 pounds of 16% acid phosphate, 200 pounds sulphate of ammonia and 200 pounds of sulphate of potash was used at the rate of 500 pounds per acre. Analysis was approximately 10-3-8.

Varieties Recommended for Boll Weevil Conditions. College No. 1, Trice, Sunbeam, Cleveland, Hooper's, Caldwell's, Toole, Cook's, Poulnot, and Dixie.

The above named varieties, according to tests and observations extending over several years in various sections of the state, are best adapted to cotton production under boll weevil conditions. Other varieties that are known to be early and that have made good yields in the different sections where they are grown, may be equally as good, but only those varieties that we have tested are included in this list.

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